

CLAIMS

1. An information-signal-processing apparatus comprising:

5 plural functional blocks each for processing an information signal; and

a control block for controlling operations of the plural functional blocks,

10 wherein the control block or a predetermined functional block of the control block and the plural functional blocks issues a common command; and

each of the plural functional blocks adaptively operates in accordance with the issued common command.

15 2. The information-signal-processing apparatus according to claim 1, wherein the functional blocks change a signal path or signal processing in accordance with the common command.

20 3. The information-signal-processing apparatus according to claim 1, wherein the control block includes command acquisition means for acquiring the common command.

4. The information-signal-processing apparatus
25 according to claim 3, wherein the command acquisition means acquires the common command from the plural functional blocks.

5. The information-signal-processing apparatus
according to claim 3, wherein the command acquisition means
30 acquires the common command from an outside of the apparatus.

6. The information-signal-processing apparatus according to claim 1,

wherein the control block has a first common command
5 that corresponds to a user operation; and

wherein if the user operation that corresponds to the first common command is performed, the control block delivers this first common command to the plural functional blocks.

10 7. The information-signal-processing apparatus according to claim 1,

wherein the control block has a second common command that does not correspond to a user operation; and

wherein the control block delivers the second common
15 command to the plural functional blocks without associating this command with the user operation.

8. The information-signal-processing apparatus according to claim 1, wherein the block that issues the common
20 command delivers most recent values of the common commands of all of kinds or some of the kinds to the plural functional blocks for every predetermined lapse of time.

9. The information-signal-processing apparatus
25 according to claim 1, wherein the block that issues the common command transmits most recent values of the common commands of all of kinds or some of the kinds if a command indicative of a normal operation from the functional block that is to operate when having received the issued common command is not returned.

10. The information-signal-processing apparatus
according to claim 1,

wherein the functional blocks each comprises a control
section and a functional section which is controlled by this
5 functional section;

wherein the control section includes:

storage means for storing a correlation between
the common command related to its own functional block
and an intra-functional-block command used to control
10 the control section;

reception means for receiving the common command
from the control block; and

conversion means for, if the common command
received by the reception means is the common command
15 related to its own functional block, converting this
common command into the intra-functional-block command
based on the correlation stored in said storage means.

11. The information-signal-processing apparatus
20 according to claim 1, wherein the predetermined functional
block issues the common command including a result of
processing the information signal.

12. The information-signal-processing apparatus
25 according to claim 1, wherein the control block and said plural
functional blocks are connected to each other via a control
bus.

13. The information-signal-processing apparatus
30 according to claim 12,

wherein each of the plural functional blocks is constituted of a substrate; and

wherein some or all of the plural functional blocks are respectively inserted into slots formed in a chassis thereof.

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14. A functional block control method comprising the steps of:

transmitting a common command to plural functional blocks, respectively, used to process an information signal
10 from a control block or from a predetermined functional block of the control block and the plural functional blocks; and
adaptively operating the plural functional blocks in accordance with the common command.

15 15. A functional block comprising:

a control section; and

a functional section that is controlled by this functional section,

wherein the control section includes:

20 storage means for storing a correlation between a common command related to its own functional block and an intra-functional-block command used to control the control section;

reception means for receiving the common command
25 from a control block; and

conversion means for, if the common command received by the reception means is the common command related to its own functional block, converting this common command into an intra-functional-block command
30 based on the correlation stored in the storage means.

16. The information-signal-processing apparatus according to claim 1,

wherein the control block and the plural functional
5 blocks respectively have a bus interface;
wherein the control block and the plural functional
blocks respectively are connected to each other by a bus using
the bus interface; and
wherein the bus interface includes:
10 a message buffer for storing received data; and
a message storage control section for selectively
storing data received via the bus in the message
buffer.

15 17. The information-signal-processing apparatus according to claim 16,

wherein the control block transmits the common command
having at least an identifier to the plural functional blocks;
and

20 wherein if the identifier of a predetermined common
command that has been set beforehand agrees with an identifier
of the common command that has been received via the bus, the
message storage control sections in the plural functional
blocks store this received common command into the message
25 buffer.

18. The information-signal-processing apparatus according to claim 16, wherein the bus is a CAN bus.